

ILYAS IBRAGIMOV

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SUMMARY

Software engineer with 6+ years building platform infrastructure and trading systems at quantitative hedge funds. At Two Sigma, backend engineer on firm-wide cost and metrics systems in Python, dbt, BigQuery, and SQL, with multiple LLM-powered tools in production. Previously built Python portfolio analytics, optimized C++ trading systems, and integrated exchange connections.

EXPERIENCE

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| Senior Software Developer | Nov. 2022 – Present |
| Two Sigma (via Randstad Digital) | New York, NY |
| <ul style="list-style-type: none">Built and maintained the ELT pipeline for a firm-wide cost transparency platform over 3 years with Python, dbt, and BigQuery: 8+ disparate data sources, 15+ TB of usage data daily across hundreds of products, \$80MM+ in annual spend. Became sole backend engineer after the lead's departure.Built a firm-wide metrics platform in Python, BigQuery, and SQL, ingesting hundreds of KPIs from multiple teams and sources for executive dashboards and team-level tracking.Onboarded a new engineer to the team and together decomposed an inherited legacy monolith into 5 loosely coupled pipelines with dedicated CI/CD, automated testing, and programmatic data ingestion.Drove early adoption of dbt (Data Build Tool) at the firm. Co-authored the internal best practices guide, built quickstart repos, and gave presentations that accelerated usage across multiple teams. Led the migration from Apptio to Python, dbt, and BigQuery, delivering \$1MM+ in annual savings and 65% faster processing.Created an LLM-powered department reorganization detection system: a pipeline using Claude and Vertex AI that analyzes employee movement patterns, classifies organizational changes, and applies retroactive cost corrections. Eliminated weeks of manual investigation per reorganization.Designed an automated incident response system with GitHub issue creation, Slack alerting, and AI-generated root-cause analysis via Claude Code. Hardened ELT pipelines with schema drift auto-recovery, exponential backoff retries, and safe handling of upstream outages.Built a PowerPoint generation framework for Claude Code: fully editable, branded decks with employee photo lookups, auto-generated figures and tables, and Google Workspace uploads. Includes custom skills, prompts, assets, JavaScript rendering scripts, and Playwright layout tests. | |
| Software Developer | Jan. 2020 – Nov. 2022 |
| Blueshift Asset Management | Red Bank, NJ |
| <ul style="list-style-type: none">Built a real-time portfolio monitoring platform with terminal-based GUI, automated investor reporting, and historical performance tracking. Reduced analysis time by 65% and supported \$500M+ in managed assets.Optimized the fund's proprietary C++ trading platform, reducing storage by tens of terabytes and production server load by 40%.Integrated with multiple equity and crypto exchanges and built Python/Selenium data scrapers feeding alternative data research: social media signals, transcribed investor calls, and market sentiment analysis.Designed a real-time compliance monitoring system automatically flagging banned tickers and improper trade amounts before execution, preventing regulatory violations. | |
| Platform Development Intern | July 2018 – Sep. 2018 |
| Fidessa | Woking, UK |
| <ul style="list-style-type: none">Built a secure file transmission platform in Java and JavaScript that eliminated recurring data breaches affecting 200+ clients, replacing vulnerable manual processes. | |

TECHNICAL SKILLS

Languages: Python, SQL (BigQuery), C++, Bash, JavaScript

Data & Analytics: dbt, BigQuery, PostgreSQL, Dimensional Modeling, ELT Pipeline Design

Cloud & Infrastructure: GCP (BigQuery, GCS), AWS, Docker, GitHub Actions, Linux/Unix

AI/LLM: Claude Code, Claude API, Claude Skills, MCP Servers, Agentic Workflows, Test-Driven LLM Development

Tools & Platforms: Git, GitHub, Datadog, Jira, Slack, Google Workspace, Excel, REST APIs

Frameworks & Testing: Flask, Django, Playwright, Selenium

EDUCATION

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| University College London (UCL) | London, UK |
| <i>Master of Engineering (Electronic & Electrical), First Class Honors (4.0 GPA Equivalent)</i> | 2019 |
| Baruch College MFE Program | New York, NY |
| <i>C++ Programming for Financial Engineering Certificate, Distinction</i> | 2020 |
| Brooklyn Technical High School | Brooklyn, NY |
| <i>High School Diploma, Mathematics Major, Math Team, 4.0 GPA</i> | 2015 |

PROJECTS

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| Network Packet Routing with Deep Reinforcement Learning | MEng Thesis, First Class Honors |
| <i>University College London (UCL)</i> | 2019 |
| • Developed deep reinforcement learning models for optimal packet routing in software-defined networks using Python, OpenAI Gym, and TensorFlow. | |
| Deep Learning Applications in Cryptocurrency Trading | BEng Thesis, First Class Honors |
| <i>University College London (UCL)</i> | 2018 |
| • Built and refined LSTM networks for cryptocurrency return prediction using Python/Keras with extensive feature engineering and data mining. | |